

Note on some recent Additions to the ICHTHYOLOGICAL Fauna of  
Massachusetts.

BY THEODORE GILL.

During a short sojourn in the summer of the present year at Wood's Hole, Massachusetts, Prof. S. F. Baird paid especial attention to the Fishes of that locality, and obtained specimens of forty-seven distinct species. Among these, there are three that have not before been noticed as inhabitants of the shores of Massachusetts. The three species are all well known and common along the Southern coast, and one of them was extremely abundant at Wood's Hole. Two belong to the family of Carangoids, and the genus *Trachynotus* and one to the genus *Cyprinodon*, of the Cyprinodont family. The *Trachynoti* were *T. carolinus*, of which many young specimens were secured, and *T. ovatus*, of which only two were obtained. The *Cyprinodon* was the *C. variegatus* Lac., and was found in very great numbers.

Since the publication of the several parts of Dr. Storer's illustrated "History of the Fishes of Massachusetts," ten marine species have been added. The following is a list:

1. *SEBASTES FASCIATUS* Storer, Proc. Boston Soc. Nat. Hist., v. 31.  
Provincetown, Capt. Atwood.  
A doubtful species.
2. *CENTRISCUS SCOLOPAX* Storer, op cit., v. 178.  
Dr. Storer has noticed "a specimen of the Trumpet Fish (*Centriscus scolopax*) caught at Provincetown, the first known to have been taken on this coast." The specific identity of the specimen with *C. scolopax* requires confirmation.
3. *ZENOPSIS OCELLATUS* Gill, = *ZEUS OCELLATUS* Storer, op cit. vi. 888.  
"Found at Provincetown, Mass."
4. *PRIACANTHUS ALTUS* Gill.  
I am indebted for my knowledge of this species as a visitor to the Massachusetts coast, to Mr. F. W. Putnam, of Cambridge. He has kindly informed me that, since the species was described, two specimens have been examined by himself,—one from Providence, Rhode Island, mentioned in the Annual Report of the Trustees and Directors of the Museum of Comparative Zoology, (Cambridge) for 1862, and a second taken at Marblehead, Mass., and preserved in the collection of the Essex Institute.
5. *AMMODYTES DUBIUS* Reinhardt.  
One specimen has been recorded by Dr. Günther (Cat. Fishes, iv. p. 387) as having been sent from Boston, by W. Winstone, Esq.
6. *CILIATA ARGENTATA* Gill, = *Motella argentata* Reinhardt.  
A single specimen of this species has been obtained by Dr. Slack, at Nahant. It had been previously known only as an inhabitant of Greenland, or the open sea of high latitudes. Its occurrence at Nahant has been noticed in the Proceedings of the Academy of Natural Sciences of Philadelphia, for 1863, (p. 241).
7. *TRACHYNOTUS CAROLINUS*, Gill ex Linn.
8. *TRACHYNOTUS OVATUS*, Gthr. ex Linn.
9. *CYPRINODON VARIEGATUS*, Lac.
10. *CRYPTACANTHODES INORNATUS* Gill.

This species, first referred to under present name by Dr. Holmes, in his Report on the Fishes of Maine, has been found in the waters of Massachusetts, according to Mr. F. W. Putnam, who has kindly informed me that male and female specimens are preserved in the Zoological Museum of Cambridge. The species is extremely closely related to *C. maculatus* St. (= *Fierasfer ? borealis* DeKay

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St. ex Peck), but is entirely destitute of spots. The specimen which afforded the foundation on which it was inserted in the Catalogue of Maine Fishes was obtained by Dr. Stimpson several years ago.

The subclass of Elasmobranchiates has not been yet treated of in Dr. Storer's "History." Since the publication of his "Report," he has added several species of great interest. The species enumerated in the Report are the following:

*Carcharias vulpes* = *Alopias vulpes* Bon.

*Lamna punctata* = *Isuropsis* Dekayi Gill, (not *Sq. punctatus* Mit.)

*Spinax acanthias* = *Acanthias americanus* St. = *Squalus americanus* Gill.

*Somniosus brevipinna* Les.

*Raia batis* = *Rara lævi* Mitchill.

*Carcharias obscurus*\* = *Eulamia cœrulea* Gill.

To these were subsequently added:

1. CESTRACION ZYGÆNA Gill = *Zygæna malleus* St. Boston, Jour. Nat. Hist., iv. 185, = *Zygæna subarcuatus* St. op. cit. iii. 71.
2. TRYGON CENTROURA (Storer, op. cit. iv. 186.
3. MYLIOBATIS BISPINOSUS Storer, op. cit. iv. 187.
4. TETRONARCE OCCIDENTALIS Gill = *Torpedo occidentalis* Storer, Am. Jour. Sc. v. Arts, xlv. 165.
5. MUSTELUS CANIS Storer, Syn. Fishes N. A., p. 253 Mem. Am. Ac. ii. 505.
6. EUGOMPHODUS LITTORALIS Gill, = *Carcharias griseus* St., Proc. Boston Soc. ii., 1846, p. 256, = *Odontaspis*? sp. Desor op. cit. ii., 1847, p. 264.
7. GALEOCERDO? sp. = *CARCHARIAS ATWOODI* St., op. cit. iii., 1848, p. 72.

#### Note on the species of SEBASTES of the Eastern coast of North America.

BY THEODORE GILL.

Cuvier and Valenciennes, fully describing and figuring the *Sebastes norvegicus* as the type of the genus *Sebastes*, attribute to it a height at the pectorals contained rather less than three times and a half in the length, a head forming a third of the length, and an eye equalling a quarter of the head's length. The rays of the dorsal fin were XV. 15; of the anal, III. 8. The color was said to be uniform reddish, with a blackish spot towards the angle of the operculum. "This description was based on individuals from Norway and Newfoundland, which did not appear to differ in form."† Remembering how cautious those great naturalists were in identifying species from distant localities, there can scarcely remain any doubt that they had specimens of the true *Sebastes norvegicus* from Newfoundland. Since that period, its existence in Greenland, previously signalized by Fabricius, has been confirmed by Reinhardt and Günther. The *Perca norvegica* of Fabricius, and *Sebastes norvegicus* of Cuv. and Val., Richardson, Reinhardt, and Günther, are therefore without doubt the same as the species of Norway.

But in 1839, Dr. Storer, in his Report, described under the name of *Sebastes norvegicus*, a specimen whose head, "from tip of lower jaw when closed to posterior angle of operculum," equalled a third of the length, and whose very large eye had a diameter "equal to one-third the length of head."

Dekay evidently borrowed his description and figure of *Sebastes norvegicus* from the Histoire naturelle, and remarked that "this is a rare fish in our waters. It is called, by our fishermen, *Red Sea Perch*, and they say it is only

\* Teeth above "in the middle of the jaw, one inch and two lines high, and one inch wide at their base;" "in the lower jaw, similar in their form and number, but smaller than those in the upper jaw."

† Hist. Nat. des Poissons, iv. p. 333.